Refracting the discourse of Payments for Ecosystem Services? A view from anthropology

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Discussion for the panel 'Cashing in on conservation', American Anthropological Association annual conference, New Orleans, 17-21 November 2010, of papers by:
1. Mamta Vardhan ~ *Crossing paths: matriliny, carbon forestry and women's rights in the Uluguru Mountains, Tanzania*;
and 2. Heather Yocum ~ *Carbon sequestration projects and forest governance in Malawi*.

To refract

1. ... To change direction as a result of entering a different medium
2. … To cause... to change direction as a result of entering a different medium.[1]

These papers by Mamta Vardhan and Heather Yocum are two significant interventions in an area that speaks to fundamental questions regarding who we are as human persons in relationship with more-than-human natures. Currently, the globalising project of producing conservation outcomes through asserting nature's value in monetary terms, for example through Payments for Ecosystem Service (PES) schemes, is implicitly occluding other forms of value. It is displacing other onto-epistemological understandings of what it means to be human in generative relationship with non-human natures. It is reducing and deadening knowledge diversity in the process, at the same time as proliferating new accounts of human/non-human relationships that satisfy its particular criteria for 'truth'.

Anthropology, and particularly its engagement with diverse perspectives through comparative ethnography, has a significant role to play in making legible, and in foregrounding, different values and understandings. This is also a political project. It is impossible to understand the structuring effects of new conservation markets and the assumptions on which they are based, without engaging with the structuring effects of hegemonic institutions and the value-forms with which they are associated. My view is that anthropology, through valuing in-depth and reflexive participation with specific contexts, is an important and legitimate means of engaging with the multifaceted implications of current conservation markets, and of PES as a critical aspect of this. But that as anthropologists we will also have to work politically if the complexities emerging from our research and thought are to refract globalising trajectories and a hegemonic discourse of neoliberal conservation. By 'neoliberal conservation' I mean the assumption that nature can be equitably and adequately conserved through new markets in conservation products that additionally foster wealth creation and economic growth.[2]

My reading of Yocum's and Vardhan's papers is that they emphasise two critical aspects of emerging PES discourse and practice. These are:
1. a bringing into focus of the complex ways in which broad level environmental initiatives mesh with and shape local situations to privilege some interests over others, and to radically shift and shape local institutions and assumptions in the process. Mamta Vardhan's paper thus clarifies the ways in which PES, as a commercialising process, is working to privilege men's access to land. This

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1 http://en.wiktionary.org/wiki/refract, accessed 26 November 2010.

2 Sullivan, S. 2006 The elephant in the room? Problematizing 'new' (neoliberal) biodiversity conservation, *Forum for Development Studies* 33(1):105-135, online: http://siansullivan.files.wordpress.com/2010/02/article-sullivan.pdf; Igoe, J. and Brockington, D. 2007 Neoliberal conservation: A brief introduction. *Conservation and Society* 5(4): 432–449.

is through tapping into a familiar trajectory whereby the sphere of monetised wealth creation, as a public sphere, tends to consolidate power, land and resources in the hands of men. In this case, this consolidation is connecting with, and transforming, key cultural practices. These include matrilineal descent and the residence of a husband in the village of their wife, both of which tend to focus land and resources in the hands of women. With the commercialisation of tree planting and the capture of land that this requires, these are being reconfigured in the opposition direction to become consolidated in the hands of men. This is the first time I have seen a specifically gendered analysis of PES in practice, and this effort, combined with the detail on culturally-mediated institutions, is to be applauded.

2. The second aspect that I wish to draw out is the work done by Heather Yocum to document and tease out the significant policy and institutional changes implied in the instituting of PES schemes. Her case study of the legislative, policy and institutional context of emerging PES schemes in Malawi is revealing. It demonstrates in detail the intense bureaucratic effort that goes into the creation and governance of PES schemes, that otherwise tend to be promoted and celebrated as a way of generating conservation outcomes by *reducing* government involvement in regulatory and other direct means of protection. Heather's paper shows how 'free-market' approaches, although based on an assumption that conservation outcomes will emerge from market-based transactions between buyers and sellers given the correct incentives built into market structures, in fact rely on heavy state and bureaucratic involvement. This is needed to shore up the institutional and regulatory means via which such 'free-markets' can be administered and through which they can function. The associated discourse of 'free-markets' as the route to conservation outcomes that also permit economic growth, thus masks and conceals the roles of government in facilitating the capture of public goods for private administration and profit.

I would like to proceed by highlighting a few theoretical dimensions that might be brought in here to assist with contextualising and explaining these processes. I will close with some thoughts regarding the structuring effects of PES discourse more broadly, and the possibilities for an engaged anthropology to intersect with, and intervene in, this discourse.

First, both these papers employ ethnographic detail to demonstrate the specificity of transformations that are occurring in the guise of local and national development, whilst in fact facilitating particular captures of natural resources. In these cases this is in terms of: 1. a capture of southern forest resources basically as dumping grounds for global and primarily northern carbon emissions (as in Yocum's case); and 2. a consolidation of commercialised land and resources by men (as in Vardhan's case). An area of theory that might be brought into explain these phenomena is that of primitive accumulation as originally framed by Marx.[3] This has been extended recently in a range of innovative ways by theorists such as by Silvia Federici, writing about the consolidation of land, the body and women's bodies in the hands and administrations of an emerging bourgeoisie in medieval Europe;[4] as well as by critical geographers such as David Harvey and Saskia Sassen.[5] Atttention to this literature would, I think, would help place the specific contexts documented here within a strengthened understanding of their entanglements with broader structuring processes.[6]

[3] Marx, K. 1974 (1887) *Capital: A Critical Analysis of Capitalist Production*, ed. By F Engels, trans. by S Moore and E Aveling. London: Lawrence and Wishart.

[4] Federici, S. 2004 *Caliban and the Witch: Women, the Body and Primitive Accumulation in Medieval Europe.* New York: Autonomedia.

[5] Harvey, D. 1975 The geography of capitalist accumulation: a reconstruction of the Marxian theory. *Antipode* 7(2): 9-21; Harvey, D. 2003 *The New Imperialism*. Oxford: Oxford University Press; Sassen, S. 2010 A savage sorting of winners and losers: contemporary versions of primitive accumulation. *Globalizations* 7(1-2): 23-50.

[6] I have describe this in more detail in Sullivan, S. 2010 The environmentality of 'Earth Incorporated': on contemporary primitive accumulation and the financialisation of environmental conservation, presented the conference *A Brief Environmental History of Neoliberalism*, Lund University, Sweden, May 2010. Online:

A second key area of theory that might enhance the explanatory power of specific cases is that of Foucault's work on liberalism, particularly his recently published lectures on biopolitics.[7] In these he traces in prescient and precise detail the structuring role of what he calls the 'truth regime of the market' in a consolidating and globalising neoliberal political economy regime. Given the implicit norms and rules embodied in the empowered governmentality – or techniques of government – associated with this truth regime, it becomes easier to bring into focus the rationality guiding neoliberal approaches to conservation. In other words, to understand this as producing a coalescence of necessary governance practices and outcomes that are the way they are precisely so that they may uphold the fetish of the 'free market' as unquestioned truth: as an implicit moral economy that attains a mystified independent power over people, such that all social relations and action are rational only to the extent that they satisfy the rules of this fetish. All extensions of governance – from internal to external human natures, to multiplicitous more-than-human realms – thereby become structured so as to satisfy market-driven liberal logics, that themselves revolve around a range of context-laden assumptions. These include that people are individualist utility-maximisers; that value resides primarily in objects rather than in social relationships; that resource scarcity institutes greater resource value and protection; and that markets based on these assumptions deliver the most efficient and equitable allocation of resources.[8]

This makes it clear that critique of such approaches - a critique necessitated by both the societal inequities and pathological ecologies with which this truth regime arguably seems to be associated[9] – needs to take place at the level of onto-epistemological understandings of the natures of reality, and of the sorts of values and practices that thereby arise. For perhaps obvious reasons, this is a project that anthropology is superbly placed to speak to: and in Vardhan's and Yocum's papers we have the seeds of possibilities for an ethnographic project that might both open up and *refract* the terms of debate underscoring neoliberal approaches to conservation.

I would like to move now to consider the structuring discourse of ecosystems services more generally.

Conservation biologists have been labelling nature as service provider by using the language of ecosystem services since the 1970s.[10] Some years later (1997), ecological economist Robert Costanza and colleagues brought the concept of ecosystem services firmly into economics by estimating their annual value globally to be $16-54 trillion.[11]

In 2005 the concept was consolidated as a way of talking about the productivity, diversity and functioning of the non-human world, through publication of the influential United Nations Millennium Ecosystem Assessment (MEA).[12] This highlights human-generated change of the

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http://www.worldecologyresearch.org/papers2010/Sullivan_financialisation_conservation.pdf

7 Foucault, M. 2008 (1979) *The Birth of Biopolitics: Lectures at the Collège de France 1978-1979*. trans. By G Burchell. Basingstoke: Palgrave Macmillan.

8 For explorations of these themes see Kosoy, N. and Corbera, E. 2010 Payments for ecosystem services as commodity fetishism. *Ecological Economics* 69(6): 1228-1236; Muradian, R., Corbera, E., Pascual, U., Kosoy, N. and May, PH 2010 Reconciling theory and practice: an alternative conceptual framework for understanding payments for environmental services. *Ecological Economics* 69(6): 1202-1208.

9 cf. Sassen op. cit.; Zalasiewicz, J., Williams, M., Steffen, W. and Crutzen, P. 2010 The new world of the Anthropocene. *Environmental Science & Technology* 44: 2228–2231.

10 Bormann, F.H. 1976 An inseparable linkage: conservation of natural ecosystems and the conservation of fossil energy. *BioScience* 26: 754-760; Ehrlich, P.R. 1982 Human carrying capacity, extinctions and nature reserves, *BioScience* 32: 331-333.

11 Costanza, R., d'Arge, R., de Groot, S., Farber, M., Grasso, B., Hannon, K., Limburg, S., Naeem, R., O'Neill, J., Paruelo, R., Raskin, R., Sutton, P. and van den Belt, M. 1997 The value of the world's ecosytem services and natural capital. *Nature* 387: 253-260.

12 MEA 2005 *Millennium Ecosystem Assessment: Ecosystems and Human Well-being*, Washington D.C.: Island Press.

biosphere and overwhelmingly uses the language of ecosystem services in speaking of the non-human world. These are further categorised into provisioning services (food, water, timber, fibre, etc.), regulating services (floods, droughts, land degradation and disease), supporting services (such as soil formation and nutrient cycling), and non-material cultural services (recreational, spiritual, religious, etc.).[13]

Through combining the quantification skills of ecological science and economics, the discourse of PES proposes that breaking nature down into the services 'it provides', quantifying their functionality, and assigning a price to them, will assist conservation by asserting their financial value and thereby contributing to economic growth.[14] This will be in two key ways:

1. through adding value to land where measured ecosystem services are being sustained, and thus rewarding landowners for conservation-compatible land-uses at the same time as manufacturing wealth creation through the valuation process;
2. and secondly, through creating new tradable units of newly priced conservation assets.

As a consequence, what has happened is that the concept of ecosystem services now is simply equated with financial value. So for Adam Davis writing in the *Duke Environmental Law and Policy Forum* in 2010, '[t]he concept of ecosystem services' *is* 'the financial value of the measurable productivity of natural systems'.[15]

There are significant structuring and conceptual implications of this new nature discourse, which anthropology can open up and elucidate in innovative ways. I suggest some of these below.

First, PES systemically consolidates and rewards capitalism - as an economic system based foundationally on the right to private property.[16] As Davis states, 'the principle that we can own land, build on it, and take resources from it is still a rock on which the world economy stands'.[17] For anyone in any context to participate there is an implicit necessity for clear and formal tenure relationships to be demonstrated. This has profound implications for common property regimes, and anthropologists have a role in elucidating the ways in which these forms of management both manifest and are affected by shifts towards relatively fixed and individualised tenure (as Mamta has done in her paper).

Second, there are important conceptual and ethical implications of transforming the non-human world into a service-provider for humans. While in part a discourse that emphasises connections between human and non-human spheres, this radical ideational shift actually further flattens non-human nature into an object of many objects, that exists to provide the backdrop to human activity. It continues a thoroughly modern objectifying onto-epistemology by consolidating ecological nature as a separate ontological sphere, to be thought of primarily in terms of utility. This turns on its head a notion present in many cultures of what might be termed broadly as 'service to life's flourishing': the implicit necessity of acting so as to enhance life rather than extract value from 'it'.[18]

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[13] As highlighted in Sullivan, S. 2009 Green capitalism, and the cultural poverty of constructing nature as service-provider. *Radical Anthropology* 3: 18-27 online: http://siansullivan.files.wordpress.com/2010/02/sian-article.pdf; McAfee, K. and Shapiro, E. 2010 Payments for ecosystem services in Mexico: nature, neoliberalism, social movements, and the state. *Annals of the Association of American Geographers* 100(3): 579-599.

[14] Ruffo, S. and Kareiva, P.M. 2009 Using science to assign value to nature, Guest Editorial, *Frontiers in Ecology and the Environment* 7: 3; see critique in Sagoff, M. 2008 On the economic value of ecosystem services, *Environmental Values* 17: 239-257; Spash, C. 2008 Ecosystems services valuation, *Socio-economics and the Environment in Discussion, CSIRO Working Paper Series* 2008-03. Online.

[15] Davis, A.I. 2010 Ecosystem services and the value of land. *Duke Environmental Law and Policy Forum* 20(2): 339-384, p. 339 online: http://www.law.duke.edu/journals/delpf/

[16] Hardt, M. and Negri, A. 2009 *Commonwealth*. Cambridge, Massachusetts: Harvard University Press.

[17] Davis, op. cit. p. 340.

[18] Sullivan, 2009 op. cit.

Third, PES relies on a disaggregation of nature into service and other units, so as to permit 'valuation' as monetisation, and the ensuing creation of commodities that can be profitably traded. Again, this furthers a reification of nature into objects in which value resides, rather than as a *milieu* of immanent and continually negotiated and lived social relations. It pursues what in fact is a foundationally *unecological* project of fragmentation and disconnection, by disembedding new nature categories from the assemblages of relationships with which they are bound, and through which they are enabled. Carbon, for example, is becoming a reified object that through its essentialising as a denominator that can mediate diverse spheres of production and exchange, is permitting wealth creation through the exchange of previously incommensurable entities.

To take another example, in species banking, which is an emerging approach to species conservation here in the US and elsewhere, units of exchange are derived from species presence on private land, that can be sold as species credits to mitigate the possibly harmful impacts (on a species) caused by development impacts elsewhere. Currently these exchanges are intended to be within the same broad 'service area', and should be 'in kind', i.e. the species credits should be for the species harmed. Proposals are being made, however, for exchanges in units of conservation to be possible internationally via global markets, and, to include 'out-of-kind' exchanges of species credits. Perhaps we are looking at a future whereby species credits for, let's say the habitat of a San Joaquin Kit Fox in the US, might be bought to mitigate mining impacts on populations of breeding pairs of a protected bird species in Australia. In other words, monetised nature exchanges for units of conserved nature are creating a nature that increasingly is decoupled from place, with significant implications for both ecology and for human relationships with nature.[19]

As we know as anthropologists, this is qualitatively different to many of the socio-ecological worldviews expressed by cultures globally. As Viveiros de Castro writes of Amerindian cosmologies, the effort of knowing non-human natures might be more cogently described as an iterative process of subjectifying and personifying all presences and perspectives; of recognising ontological kinship across the human / non-human binary, and of understanding a subjective and sentient potency to animate and infuse all domains of existence.[20] These are aspects that I recognise from my own long-term ethnographic fieldwork in north-west Namibia,[21] and is supported by a brief period of fieldwork with ayahuasca shamans in Ecuador and Peru. Such onto-epistemological realities affirm possibilities for radically engaged socio-ecologies based on reciprocal and communicative exchange with more-than-human natures. In contrast, new nature markets are producing products and exchanges that are profoundly disconnected from the broader assemblages that in fact bring them forth. As the anthropologist Gregory Bateson suggested in the 1970s, we perhaps would be wise to distrust policy decisions emanating from such disconnections – disconnections which flow from separating mind from both the body and from the worlds around us.[22]

This leads to my fourth point. This is the observation that online electronic technologies increasingly are facilitating and making possible these sorts of exchanges and models for

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[19] See discussion and references in Pawliczek, J. and Sullivan, S. Forthcoming. Conservation and concealment in SpeciesBanking.com, US: an analysis of performance in the species offsetting service industry, online: http://siansullivan.files.wordpress.com/2010/12/pawliczek-sullivan-sppbanking-env-cons-nov-2010.pdf

[20] Viveiros de Castro, E.B. 2004 Exchanging perspectives: the transformation of objects into subjects in Amerindian ontologies. *Common Knowledge* 10(3): 463-484.

[21] e.g. Sullivan, S. 2010 'Ecosystem service commodities' – a new imperial ecology? Implications for animist immanent ecologies, with Deleuze and Guattari. *New Formations* 69: 111-128, online: http://siansullivan.files.wordpress.com/2010/02/sullivan-new-formations-article1.pdf

[22] Bateson, G. 1972 *Steps to an Ecology of Mind*. London: Palladin. This point is emphasised in the excellent discussion by Hawkins, P. 2004 A centennial tribute to Gregory Bateson 1904-1980 and his influence on the fields of organizational development and action research. *Action Research* 2(4): 409-423.

human/nature relationships associated with conservation markets. These seem to be facilitating the emergence of profound geographies of non-locality in emerging conservation markets; of a conserved nature that is managed by remote control.[23] Gone are the days when conservation might be seen as residing in particular land areas, such as those set aside as national parks; or where particular aspects of the non-human world might be seen as inextricably entwined with the geography of their occurrence. Today nature is de-territorialised and mobile, at least in its marketised and increasingly financialised form.[24]

All of these are making possible the opening and establishment of PES and conservation markets as a highly exciting and lucrative frontier for financial speculation and investment.[25] Conservation markets are becoming attractive to financiers, and also are increasingly being financialised in the sense of creating new derived financial products from conserved nature and from nature dynamics. Proposals for biodiversity derivatives and current climate derivatives are cases in point.[26] This frontier has the form of any other speculative frontier for capital expansion: it involves the rapid staking of claims to new and proliferating products from which wealth can be created; and a celebratory and agitated discourse of the income returns that might be made from participating in these new markets.[27]

As I have intimated, anthropologists have the potential, and perhaps even the responsibility, to bring into focus the cultural *specificity* of this project and the knowledge claims on which it is based; as well as the existence of other possibilities for human understanding and action with the engaged presence of more-than-human worlds. In engaging with such a project, however, we might also have cause to reflect on our own methods of academic knowledge production. In modern, and I might add neoliberalised, academia, we are disciplined in various ways to conform with broader hegemonic structures: through competing with each other; through feeling a sense of ownership and protection over ideas; through thinking that ideas somehow reside in individuals rather than in relationships (an assumption that Foucault, of course, dismantled in his important essay 'What is an author?'[28]). We perhaps are caught up in ways of being and of producing knowledge that also are profoundly unecological. My final comment, then, is a call for a consciously ecological scholarship that is performed in collaborative service to life's flourishing; rather than in competition with each other.

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[23] cf. Guattari, F. 2000 (1989) *The Three Ecologies*, trans. Ian Pindar and Paul Sutton. London: Continuum, pp. 28-29; after Virilio, P. 1994 *The Vision Machine*, trans. Julie Rose. London and Indiana: BFI and Indiana University Press.

[24] Büscher, B. forthcoming. Nature on the Move I: Nature on the Move: capital, circulation and the value of fictitious conservation; Igoe, J. forthcoming. Nature on the Move II: making, managing and marketing an accessible and penetrable nature that seems to dominate our environment by virtue of its circulation.

[25] Sullivan, S. forthcoming. Banking nature: the spectacular financialisation of environmental conservation, with Marx and Foucault, online: http://siansullivan.files.wordpress.com/2010/12/sullivan-banking-nature-submission-to-antipode.pdf

[26] Mandel, J., Donlan, J. and Armstrong, J. 2010 A derivative approach to endangered species conservation. *Frontiers in Ecology and the Environment* 8(1): 44-49; Cooper, M. 2010 Turbulent worlds: financial markets and environmental crisis. *Theory, Culture & Society* 27(2-3): 167-190.

[27] Tsing, A. 2005 *Friction: An Ethnography of Global Connection*. Princeton: Princeton University Press.

[28] Foucault, M. 2003 (1969) What is an author? pp. 239-253 *n* Rabinow, P. (ed.) *The Essential Foucault*. New York: The New Press.